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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,250	09/22/2003	Junichi Matsumoto	242958US2	9520

22850 7590 08/10/2005

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EXAMINER	
LEE, PETER	

ART UNIT	PAPER NUMBER
2852	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/666,250	MATSUMOTO ET AL.	
	Examiner	Art Unit	
	Peter Lee	2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/22/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-7, 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welch et al. (US pn 6311745) in view of Terazawa et. al. (US 2001/0017998), and further in view of Wegman et al. (US 2004/0011425).

Welch teaches a powdered toner dispensing system (fig. 1 part 10) comprising: a dispensing container to hold the toner (Fig. 1 part 12) (ie. powder storing body) with an outlet (fig. 1 part 38) (ie. opening) at one end, a first portion of the valve (fig. 4 part 62) (ie. a base member) that is affixed to the bottom end of the dispensing container comprised of said outlet (note col. 5 lines 54-60), wherein said first portion of the valve works in conjunction with a second portion of the valve (fig. 4 part 64) (ie. outlet member), which is formed with a passage configured to transfer the powder from said dispensing container to an outlet of the dispensing container (fig. 3 part 38; note: col. 3 lines 60-63 and col. 5 lines 56-60) and has a valve to close and open (fig. 4 part 60; note col. 6 lines 1-5) (ie. shutter function) for selectively allowing passage through said outlet passage, with the second valve portion (ie. outlet member) to be easily coupled and then easily separated from first valve portion (col. 6 lines 5-8) (ie. connected to or disconnected to base member) .

Welch further teaches said first valve portion (fig. 4 part 62) (ie. base member) comprising of a powder passage (fig. 3 part 38) that allows the powder to pass there through, and the said passage has an opening area (this opening area is understood to be the opening due to the second valve portion that will encompass a separate receiving container as seen in fig. 5 part 64) larger than an open area of said first valve portion (this is seen in fig. 5 when the first valve portion 62 is seen to fit into the second valve portion 64, and the flip member 76 opens up with a smaller diameter than the opening of the second valve member 64).

Welch teaches the second valve portion (ie. outlet member/first part selectively connectable to said base member) having a second disk (part 70) fitted within the second valve portion, being part of the mechanism that provides a shutter device for controlling the toner flow.

Welch also further teaches the powder passage having an opening area (fig. 3 part 38), as measured in a plane perpendicular to a direction of flow of said powder in said powder path, and the dispensing container having lower walls that decrease in diameter in the downward direction towards the outlet of the container (col. 3 lines 60-64) (ie. decreasing from said opening of said powder storing member toward said outlet member).

Welch does not teach the dispensing container being made of a flexible material. Welch also does not teach the flexible material being used to comprise sheets to constitute side and top wall portions that are foldable inwards.

Terazawa teaches a box member (fig. 1 part 30) (ie. body member) of a toner container (fig. 1 part 1) being comprised of a powdered toner deformable bag (fig. 1 part 2) (ie. powder storage body). The said toner bag is comprised of a single flexible sheet of polyethylene (page 2 paragraph [0046]) that constitute side walls (ie. side surfaces) when the mouth member (fig. 1

part 3; note this mouth member is referenced to indicate where the first valve portion taught in Welch would be) (ie. base member) is positioned at a bottom position, and this same sheet member constitutes a top portion of the toner bag (ie. sheet member constituting a top). The said top portion of the toner bag is comprised of folded portions (fig. 1 part 10; note page 3 paragraph [0054]), which along with the foldable portions shown by the dashed line on the side walls of the body portion (fig. 1 part 6), will allow the toner bag to be foldable inwards.

Terazawa further teaches the flexible sheet forming a tapered portion (fig. 1 part 7) (ie. inclined toward said base member little by little) that is contiguous with the body portion of the bag and ends with the tapered outlet at the mouth of the bag (page 2 paragraph [0046]). The toner containing bag taught by Terazawa is built so as to prevent "buckle" in the bag structure as seen in Fig. 3 (paragraph [0048] and [0049]). By retarding the buckle in the toner bag, the toner bag succeeds in keeping an angle between each of the inner surfaces and a horizontal plane greater than an angle of repose of when the toner is packed in said toner bag (toner filled bag seen in Fig. 2).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the toner dispensing container (part 12) as taught by Welch to be a flexible bag-like powder container body as taught by Terazawa.. One of ordinary skill in the art would have been motivated to use the flexible bag-like toner container body capable of being foldable inwards because the toner container then becomes easier to handle than a traditionally hard case would, and the flexible bag-like container takes up a minimum of space which is a desirable trait (Terazawa page 5 paragraph [0079]).

Welch in view of Terazawa does not teach the powder passage to decrease from an opening of the base member (part 62) through the second portion (part 64) (ie. powder passage of said base member has an opening area larger than an opening are of said passage of said outlet member adjacent said shutter).

Wegman et al. Teaches a toner filling apparatus that includes a nozzle assembly with a housing (part 56) (ie. base). The housing portion is taught to have within it a central portion in the shape of a funnel (paragraph [0021]) (ie. opening area of said powder passage of said base member decreases from said opening of said powder storing body toward said outlet member) that is ad a toner dispensing end (ie. outlet member).

It would have been obvious to one of ordinary skill in the art to modify the invention taught by Welch in view of Terazawa to include a central portion in the shape of a funnel as taught by Wegman et al. One of ordinary skill in the art would have been motivated to modify as such in order to achieve an anti-drizzle nozzle (ie. outlet member) as is taught by Wegman et al. (paragraph [0021]).

As to claim 4, Examiner takes official notice that it is well known in the art for the base member to be made into a variety of shapes, including rectangular or circular shapes. It is also noted that for the application it is being used for, the particular shape of the base member does not warrant criticality. One of ordinary skill in the art would have found it obvious to allow such a base member to be made from a variety of shapes ranging from the circular base as seen in Welch, to the rectangular as seen in the current application. Further, since there is no basis of criticality regarding the shape of the base member given by the applicant in the disclosure, this particular limitation regarding the rectangular shape will not be considered. It is further viewed

that with such a rectangular base member, the other limitations of the claim dealing with the a pair of side surfaces, which face each other, substantially parallel to a front and a rear surface of said powder storing body, and a width between a right and a left surface of said powder storing body is smaller than a width between said pair of side surfaces of said base member will be taught by the powdered toner dispenser taught by the reference Welch.

2. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welch in view of Terazawa, further in view of Beaufort et al. (US pn 5594535), and further in view of Wegman et al.

Welch teaches a refillable toner dispensing container (container is said to have an opening through which powder can be filled; fig. 1 part 32) (ie. toner storing body) formed with a valve opening at one end (fig. 4 part 60; col. 5 lines 55-50) (ie. open portion at one end); a toner stored in said toner container (abstract 1st sentence); an outlet configured to discharge the toner from said toner container (fig.1 part 38; col. 3 lines 60-63); a second valve portion (part 64) (ie. outlet member) formed with the outlet passage configured to deliver the toner from said powder container to an outlet, and when connected to a first valve portion having a range of open and shut positions is possible (note col. 6 lines 13-24) (ie. shutter function) for selectively blocking or unblocking said passage; and a first valve portion (fig. 4 part 64) (ie. base member) affixed to said first valve portion (ie. open portion) of said toner container and configured to be selectively locked or unlocked (ie. connected to or disconnected) from said second valve portion (ie. outlet member) (col. 6 line 1-8).

Welch does not teach the toner dispensing container to be part of a toner cartridge.

Terazawa teaches the use of a powdered toner deformable bag (fig. 1 part 2) (ie. powder storage body), the toner deformable bag being made of a single flexible sheet of polyethylene (page 2 paragraph [0046]). And further it is Beaufort who teaches a refillable toner cartridge that employs a flexible toner bag similar to that found in Terazawa (fig. 2 part 85; col. 2 lines 20-24 and col. 4 lines 4-6).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the toner dispensing container (part 12) as taught by Welch to be a flexible bag-like powder container body as taught by Terazawa. One of ordinary skill in the art would have been motivated to use the flexible bag-like toner container body capable of being foldable inwards because the toner container then becomes easier to handle than a traditionally hard case would, and the flexible bag-like container takes up a minimum of space which is a desirable trait (Terazawa page 5 paragraph [0079]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to make the powdered toner dispenser container (part 12) taught by Welch, with the flexible toner bag taught by Terazawa, to be part of a toner cartridge as taught in Beaufort. One of ordinary skill in the art would have been motivated to have the toner dispenser container (part 12) taught by Welch be part of a cartridge apparatus as taught by Beaufort because the cartridge layout allows for easy replacement of certain parts of an electrophotographic image machine to be replaced, namely the toner replacement (col. 1 lines 50-60).

Welch in view of Terazawa and Beaufort does not teach the powder passage to decrease from an opening of the base member (part 62) through the second portion (part 64) (ie. powder

passage of said base member has an opening area larger than an opening are of said passage of said outlet member adjacent said shutter).

Wegman et al. teaches a toner filling apparatus that includes a nozzle assembly with a housing (part 56) (ie. base). The housing portion is taught to have within it a central portion in the shape of a funnel (paragraph [0021]) (ie. opening area of said powder passage of said base member decreases from said opening of said powder storing body toward said outlet member) that is ad a toner dispensing end (ie. outlet member).

It would have been obvious to one of ordinary skill in the art to modify the invention taught by Welch in view of Terazawa in view of Beaufort to include a central portion in the shape of a funnel as taught by Wegman et al. One of ordinary skill in the art would have been motivated to modify as such in order to achieve an anti-drizzle nozzle (ie. outlet member) as is taught by Wegman et al. (paragraph [0021]).

Response to Amendment

Enter amendments to claims

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Response to Arguments

4. Applicant's arguments with respect to claims 1, 3-12 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues on p. 6 of the response that the teachings of Welch in view of Terazawa, and Welch in view of Terazawa in view of Beaufort does not teach a passage of the base member having an opening area larger than a n opening area of the passage of the outlet member adjacent the shutter. Examiner has entered the amended claims, and has additionally found new art which teach the added limitation as is laid out above by the teachings of Wegman et al. (US 2004/001425).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Lee whose telephone number is 571-272-2846. The examiner can normally be reached on mon-fri 9:00 am-5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on 571-272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PL 8/8/05

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